

Abstract

FREQUENCY GENERATION IN A WIRELESS COMMUNICATION UNIT

5 A wireless communication unit (400) comprises a dual-port modulator for generating a radio frequency signal. A digital to analogue converter (446), operably coupled to a data generator (570), converts digital data to an analogue signal to be used in generating the radio
10 frequency signal. An attenuator (450), operably coupled to the digital to analogue converter (446) attenuates the analogue signal output from the digital to analogue converter (446). A signal processor (402) is operably coupled to the attenuator (450) for setting
15 an attenuation value of the attenuator (450) to balance signals input to the two ports of the dual-port modulator.

This enables the wireless communication unit to balance
20 levels of the dual-port and direct-port signals thereby minimising phase error RMS and phase error peaks in the generated frequency signal. Cheaper reference oscillators with less accuracy components may then be used, as the arrangement and method automatically
25 compensate for any mismatch between the ports.

{FIG. 5 to accompany abstract}